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REPLY TO: 4500 Forest Insect Research

November 10, 1975

SUBJECT: Spruce beetle population - San Pedro Parks

TO: Robert E. Acciavatti
R-3

My records indicate that a summary of my sampling results of the spruce beetle population in the blowdown on the east side of San Pedro Parks was not sent to R-3. I recall discussing the results with Yasinski upon our return from the field. Apparently, since the counts were so low, I never responded with a written summary after returning to Fort Collins.

November 8, 1971 is when I received word of the blowdown. May 25, 1972 I visited the area east of San Pedro Parks with C. J. Germain. Twenty trees were sampled on Sept. 19-20, 1972. Samples (6" x 6") were removed from the top, lateral and bottom sides of each sampling point. The first sampling point on each tree was near the base or just above the breakage point. Additional sampling points were every 10 ft. thereafter. Larger trees had 8 sampling points; smaller trees had 4.

The mean number of beetles per sample for the different surfaces was: Top-.004, Lateral-0.21, Bottom-1.8. Larvae constituted over 95% of the brood with a few adults (probably parent adults) present. Seven (ca. 33%) of the twenty trees were infested; the other 13 had no beetles in any of their samples. Within these seven trees, one had beetles on the top surface, and two had beetles in the lateral surfaces. Within any of the surfaces on the infested trees, beetle numbers were highly variable and not uniform throughout that surface. For instance, only 1 or 2 of the 6-8 samples had beetles.

Based on these results, I thought the population was quite low and conveyed these thoughts to Yaz. I still believe the population we sampled was low. However, our recent examination (Nov. 1975) indicates the logs were infested a second time (probably 1973) so that 2 different generations developed from the host material. I don't think the first generation contributed a substantial number of beetles. What emerged from the second generation is unknown but the numbers were probably low. However, if the blowdown was widespread, then a relatively small number of beetles emerging from each tree would constitute a significant population because there were many trees. Your records might indicate how many trees were downed. I hope this information is useful. If further explanation is needed, don't hesitate to call.

JOHN M. SCHMID
Entomologist